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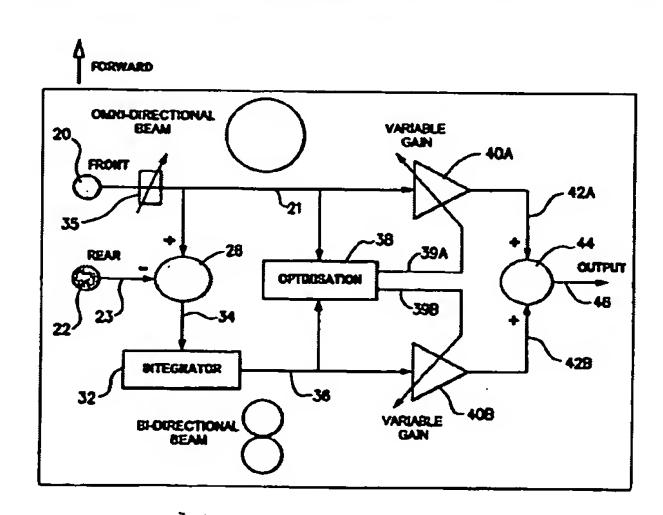
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### (54) Title: METHOD AND APPARATUS FOR PRODUCING ADAPTIVE DIRECTIONAL SIGNALS



(57) Abstract: The invention relates to adaptive directional systems, and more particularly to a method and apparatus for producing adaptive directional signals. The invention may be applied to the provision of audio frequency adaptive directional microphone systems for devices such as hearing aids and mobile telephones. The method involves constructing the adaptive directional signal (46) from a weighted sum of a first signal (42A) having an omni-directional polar pattern and a second signal (42B) having a bi-directional polar pattern, wherein the weights are calculated to give the combined signal a constant gain in a predetermined direction and to minimise the power of the combined signal. The method has particular application in producing signals in digital hearing aids, the predetermined direction being in the forward direction with respect to the wearer.